

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited on this date in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EJ199094763US addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Vicki Collins

(Type or print name of person mailing paper)

Date: March 7, 2001

Vicki Collins  
(Signature of person mailing paper)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re PATENT APPLICATION of	)	Group Art Unit: Unassigned
	)	Atty. Docket No. 172.2USDC2
Arimilli et al.	)	Examiner: Unassigned
	)	
Serial No: Continuation of 09/247,497	)	
	)	
Filed: March 7, 2001	)	
	)	
Title: NUCLEOTIDE ANALOGS	)	

**PRELIMINARY AMENDMENT**

Box Patent Application  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Please amend this application as follows:

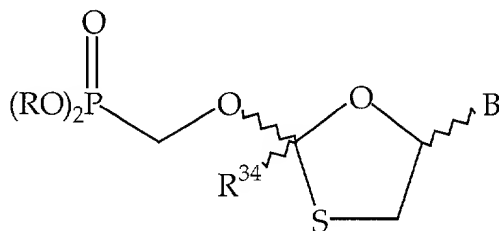
**In the Specification**

After the title on page 1 of the specification insert "This application is a continuation application of U.S.S.N. 09/247,497, filed February 10, 1999, now pending, which is a continuation application of 09/071,420, filed May 1, 1998, now abandoned, which is a divisional application of 08/617,849 filed May 6, 1996, now Patent No. 5,798,340, which is a continuation application of PCT/US94/10539, filed September 16, 1994, which is a continuation-in-part application of 08/193,341, filed February 8, 1994, now abandoned, which is a continuation-in-part application of 08/123,483, filed September 17, 1993, now Patent No. 5,656,745.

# In the Claims

Cancel claims 1-51 without prejudice and substitute new claim 52:

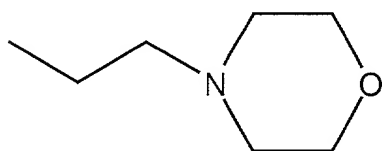
--52. A compound of the formula 2



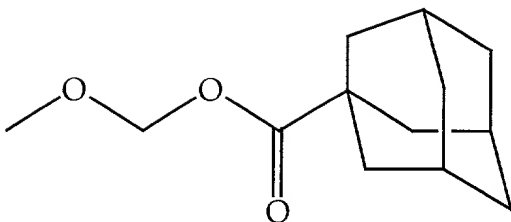
2

wherein R<sup>34</sup> is H, CH<sub>2</sub>CN, CF<sub>3</sub>;

R independently is phenyl, 2- and 3-pyrrolyl, 2- and 3-thienyl, 2- and 4-imidazolyl, 2-, 4- and 5-oxazolyl, 3- and 4-isoxazolyl, 2-, 4- and 5-thiazolyl, 3-, 4- and 5-isothiazolyl, 3- and 4-pyrazolyl, 2-, 3- and 4-pyridinyl, 2-, 4- and 5-pyrimidinyl, 2-, 3- and 4-alkoxyphenyl (C<sub>1</sub>-C<sub>12</sub> alkyl), 2-, 3- and 4-halophenyl, 2,3-, 2,4-, 2,5-, 2,6-, 3,4- and 3,5-dihalophenyl, 2-, 3- and 4-haloalkylphenyl (1 to 5 halogen atoms, C<sub>1</sub>-C<sub>12</sub> alkyl), 2-, 3- and 4-cyanophenyl, carboalkoxyphenyl (C<sub>1</sub>-C<sub>4</sub> alkyl), 1-, 2-, 3-, and 4-pyridinyl (-C<sub>5</sub>H<sub>4</sub>N), 2-, 3- and 4-nitrophenyl, 2-, 3- and 4-haloalkylbenzyl (1 to 5 halogen atoms, C<sub>1</sub>-C<sub>12</sub> alkyl), alkylsalicylphenyl (C<sub>1</sub>-C<sub>4</sub> alkyl), 2-,3- and 4-acetylphenyl, -O-C<sub>10</sub>H<sub>6</sub>-OH, -O-C<sub>10</sub>H<sub>6</sub>-O-, -O-C<sub>6</sub>H<sub>4</sub>-C<sub>6</sub>H<sub>4</sub>-O- (both oxygen atoms are linked to the phosphorus atom), alkoxy ethyl (C<sub>1</sub>-C<sub>6</sub> alkyl), phenoxymethyl, aryloxy ethyl (C<sub>6</sub>-C<sub>9</sub> aryl or C<sub>6</sub>-C<sub>9</sub> aryl substituted by OH, NH<sub>2</sub>, halo, C<sub>1</sub>-C<sub>4</sub> alkyl or C<sub>1</sub>-C<sub>4</sub> alkyl substituted by OH or by 1 to 3 halo atoms), -C<sub>6</sub>H<sub>4</sub>-CH<sub>2</sub>-N(CH<sub>3</sub>)<sub>2</sub>, N-ethylmorpholino



( ; -(CH<sub>2</sub>)<sub>2</sub>-N[(CH<sub>2</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>]O),  
adamantoyl oxymethyl, pivaloyloxy(methoxyethyl)methyl  
(-CH(CH<sub>2</sub>CH<sub>2</sub>OCH<sub>3</sub>)-O-C(O)-C(CH<sub>3</sub>)<sub>3</sub>),



( ; -O-CH<sub>2</sub>-O-C(O)-C<sub>10</sub>H<sub>15</sub>),  
 pivaloyloxymethyl (-CH<sub>2</sub>-O-C(O)-C(CH<sub>3</sub>)<sub>3</sub>), pivaloyloxy(methoxymethyl)-methyl  
 (-CH(CH<sub>2</sub>OCH<sub>3</sub>)-O-C(O)-C(CH<sub>3</sub>)<sub>3</sub>), pivaloyloxyisobutyl (-CH(CH(CH<sub>3</sub>)<sub>2</sub>)-O-C(O)-  
 C(CH<sub>3</sub>)<sub>3</sub>) isobutyryloxymethyl (-CH<sub>2</sub>-O-C(O)-CH<sub>2</sub>-CH(CH<sub>3</sub>)<sub>2</sub>), cyclohexanoyl  
 oxymethyl (-CH<sub>2</sub>-O-C(O)-C<sub>6</sub>H<sub>11</sub>), phenyl (-C<sub>6</sub>H<sub>5</sub>), benzyl (-CH<sub>2</sub>-C<sub>6</sub>H<sub>5</sub>), isopropyl  
 (-CH(CH<sub>3</sub>)<sub>2</sub>), t-butyl (-C(CH<sub>3</sub>)<sub>3</sub>), -CH<sub>2</sub>-CH<sub>3</sub>, -(CH<sub>2</sub>)<sub>2</sub>-CH<sub>3</sub>, -(CH<sub>2</sub>)<sub>3</sub>-CH<sub>3</sub>, -(CH<sub>2</sub>)<sub>4</sub>-  
 CH<sub>3</sub>, -(CH<sub>2</sub>)<sub>5</sub>-CH<sub>3</sub>, -CH<sub>2</sub>-CH<sub>2</sub>F, -CH<sub>2</sub>-CH<sub>2</sub>Cl, -CH<sub>2</sub>-CF<sub>3</sub>, -CH<sub>2</sub>-CCl<sub>3</sub>, R<sup>5</sup>, NHR<sup>6A</sup> or  
 N(R<sup>6A</sup>)<sub>2</sub>;

wherein R<sup>5</sup> is CH<sub>2</sub>C(O)N(R<sup>6A</sup>)<sub>2</sub>, CH<sub>2</sub>C(O)OR<sup>6A</sup>, CH<sub>2</sub>OC(O)R<sup>6A</sup>,  
 CH(R<sup>6A</sup>)OC(O)R<sup>6A</sup>, CH<sub>2</sub>C(R<sup>6A</sup>)<sub>2</sub>CH<sub>2</sub>OH, CH<sub>2</sub>OR<sup>6A</sup>, NH-CH<sub>2</sub>-C(O)O-CH<sub>2</sub>CH<sub>3</sub>,  
 N(CH<sub>3</sub>)-CH<sub>2</sub>-C(O)O-CH<sub>2</sub>CH<sub>3</sub>, NHR<sup>40</sup>, CH<sub>2</sub>-O-C(O)-C<sub>6</sub>H<sub>5</sub>, CH<sub>2</sub>-O-C(O)-C<sub>10</sub>H<sub>15</sub>,  
 -CH<sub>2</sub>-O-C(O)-CH<sub>2</sub>CH<sub>3</sub>, CH<sub>2</sub>-O-C(O)-CH(CH<sub>3</sub>)<sub>2</sub>, CH<sub>2</sub>-O-C(O)-C(CH<sub>3</sub>)<sub>3</sub>, CH<sub>2</sub>-O-C(O)-  
 CH<sub>2</sub>-C<sub>6</sub>H<sub>5</sub>;

wherein R<sup>6A</sup> is C<sub>1</sub>-C<sub>20</sub> alkyl which is unsubstituted or substituted by  
 substituents independently selected from the group consisting of OH, O, N and halogen  
 (1 to 5 halogen atoms), C<sub>6</sub>-C<sub>20</sub> aryl which is unsubstituted or substituted by  
 substituents independently selected from the group consisting of OH, O, N and halogen  
 (1 to 5 halogen atoms) or C<sub>7</sub>-C<sub>20</sub> aryl-alkyl which is unsubstituted or substituted by  
 substituents independently selected from the group consisting of OH, O, N and halogen  
 (1 to 5 halogen atoms), provided that for compounds of formulas N(R<sup>6A</sup>)<sub>2</sub>,  
 CH<sub>2</sub>C(O)N(R<sup>6A</sup>)<sub>2</sub>, CH<sub>2</sub>C(O)OR<sup>6A</sup>, CH<sub>2</sub>OC(O)R<sup>6A</sup>, CH(R<sup>6A</sup>)OC(O)R<sup>6A</sup> and  
 CH<sub>2</sub>C(R<sup>6A</sup>)<sub>2</sub>CH<sub>2</sub>OH, the total number of carbon atoms present is less than 25;

wherein R<sup>40</sup> is C<sub>1</sub>-C<sub>20</sub> alkyl; and

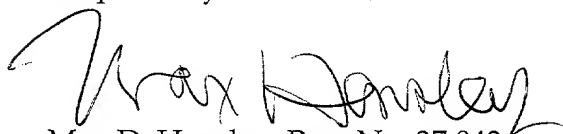
B is a 1-pyrimidinyl residue selected from cytosinyl, 5-halocytosinyl, and 5-(C<sub>1</sub>-  
 C<sub>3</sub>-alkyl)cytosinyl.--

#### Remarks

An Information Disclosure Statement with accompanying references will be  
 submitted upon issuance of a filing receipt. If the examiner has not received the  
 Information Disclosure Statement or the references, the examiner is invited to telephone  
 the undersigned to arrange for their dispatch.

This application is believed to be in condition for examination.

Respectfully submitted,



Max D. Hensley, Reg. No. 27,043

Gilead Sciences, Inc.

333 Lakeside Drive

Foster City, CA 94404

Telephone: (650) 522-5878

Facsimile: (650) 522-5575

E-mail: Max\_Hensley@Gilead.com

Date: 2/28/01